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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,986	12/02/2003	Hermann Schleicher	4452-580	4968
27799	7590	02/24/2005	EXAMINER	
COHEN, PONTANI, LIEBERMAN & PAVANE 551 FIFTH AVENUE SUITE 1210 NEW YORK, NY 10176			LAZO, THOMAS E	
			ART UNIT	PAPER NUMBER
			3745	

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/725,986

Applicant(s)

SCHLEICHER ET AL.

Examiner

Thomas E. Lazo

Art Unit

3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-14 is/are allowed.
- 6) ☒ Claim(s) 1 and 15-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/2/03</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Kirkwood et al. (5,771,691). Kirkwood et al. discloses a hydrodynamic torque converter with a pump wheel and a turbine wheel, wherein each wheel has an outer shell, an inner shell, and a plurality of vanes connecting the shells, each vane has an inner edge facing the inner shell and an outer edge facing the outer shell, each shell has an opening and a rear surface facing away from the vanes, each vane of the turbine wheel has two connecting elements received through a respective opening in the inner shell and deformed against the rear surface of said inner shell to fasten the vane to the inner shell and four connecting elements received through respective openings in the outer shell and deformed against the rear surface of the outer shell to fasten the vane to the outer shell, the individual connecting segments lie in planes which intersect at an angle which depends on the curvature of the vanes, and the opening in the inner shell which receives the connecting segments is divided in sections which lie in planes which intersect at the angle.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kirkwood et al., as applied to claim 1 above, in view of Zeidler (2,779,292). Kirkwood et al. discloses all of the claimed subject matter except for the number of connecting elements received in the outer shell exceeding the number of connecting elements received in the inner shell by three and only one connecting element received through the inner shell.

Zeidler teaches for a hydrodynamic torque converter with a pump wheel and a turbine wheel, wherein each wheel has an outer shell, an inner shell, and a plurality of vanes connecting the shells, each vane has an inner edge facing the inner shell and an outer edge facing the outer shell, each shell has an opening and a rear surface facing away from the vanes, and that each vane of the turbine wheel has only one connecting element received through the inner shell for the purposes of locking the inner shell to the vanes. See Zeidler col. 3, lines 53-67.

Since Kirkwood et al. and Ziedler are both hydrodynamic torque converters, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the converter of Kirkwood et al., based on the teachings of Ziedler, to have only one connecting element of the vane of the turbine wheel received through the inner shell and therefore have three less connecting elements than the number of connecting elements received in the outer shell for the purposes of locking the shells to the vanes.

Art Unit: 3745

Allowable Subject Matter

Claims 2-14 are allowed. The improvement comprises a first connecting element with a positioning segment, which extends substantially the length of the respective opening, and a retaining segment, which stands proud of the positioning segment but does not extend the length of the opening, wherein only the retaining segment being deformed against the rear surface.

Prior Art

Prior art made of record but not relied upon is considered pertinent to Applicant's disclosure and consists of eight patents.

Koebele (5,109,604), Misu et al. (4,665,693), Batteux (3,782,855), Iijima (3,545,883), Egbert (2,890,661), Gamble (2,855,852), Zeidler (2,752,859), and English et al. (2,745,354) are cited to show hydrodynamic torque converters.

Contact Information

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Thomas Lazo whose telephone number is (571) 272-4818. The examiner can normally be reached on Monday-Friday from 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Edward Look, can be reached on (571) 272-4820. The fax phone number for this Group is (703) 872-9306.

Art Unit: 3745

Any inquiry of a general nature or relating to status of this application or proceeding should be directed to the Patent Application Information Retrieval (PAIR) system. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.



Thomas E. Lazo
Primary Examiner
Art Unit 3745

TEL
February 18, 2005